



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,798	09/29/2006	Barry W. Townsend	183.39735AX9	7125
20457	7590	10/13/2010	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			BLANCO, JAVIER G	
1300 NORTH SEVENTEENTH STREET				
SUITE 1800			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22209-3873			3774	
			MAIL DATE	DELIVERY MODE
			10/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,798	TOWNSEND ET AL.	
	Examiner	Art Unit	
	JAVIER G. BLANCO	3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 01 September 2010.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 43-52 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 43-52 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/1/2010</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Response to Amendment

1. Applicants' cancellation of claims 1-42 in the reply filed on September 1st, 2010 is acknowledged.
2. Applicants' addition of claims 43-52 in the reply filed on September 1st, 2010 is acknowledged.

Claim Objections

3. Claims 45 and 52 are objected to because of the following informalities:
 - a. Regarding claim 45, please substitute "wherein the resilient member" with --wherein the resilient members--. Appropriate correction is required.
 - b. Regarding claim 52, please substitute "their upper and lower and ends" with --their upper and lower [[and]] ends--. Appropriate correction is required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 43-52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. **7,374,578** B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between claims 43-52 of the application and claims 1-23 of U.S. Patent No. **7,374,578** B2 lies in the fact that the patent claims include many more elements and is thus much more specific. Thus the invention of claims 1-23 of U.S. Patent No. **7,374,578** B2 is in effect a “species” of the “generic” invention of claims 43-52. It has been held that the generic invention is “anticipated” by the “species”. See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since claims 43-52 of the application are anticipated by claims 1-23 of U.S. Patent No. **7,374,578** B2, it is not patentably distinct from claims 1-23 of U.S. Patent No. **7,374,578** B2.

6. Claims 43-52 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

- (i)** Pending claims of copending Application No. **11/234,159**;
- (ii)** Pending claims of copending Application No. **11/411,133**;
- (iii)** Pending claims of copending Application No. **11/643,676**;
- (iv)** Pending claims of copending Application No. **11/643,677**; and
- (v)** Pending claims of copending Application No. **10/594,797**.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the above-indicated applications claim an ankle and a shank connected to a foot and comprising a resilient member having a lower end reversely curved (or in the form of a spiral). This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Regarding claim 48, "the coupling means" lacks antecedent basis.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 43, 44, and 46-51 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **E.C. Carter** (US 2,453,969; cited in Applicants' IDS)..

Referring to Figures 1-6, Carter discloses a prosthetic foot comprising:

- (i) A resilient foot (Figure 1: plate 22; Figure 4: member 42);
- (ii) A resilient leg portion attached to the foot; wherein the resilient leg portion includes a plurality of elongated, upwardly extending resilient members (Figure 1: springs 6/18) which are anterior facing convexly curved (Figure 1: front surface of spiral 6, or front surface of coil 5; Figure 4: front surface of spring 40) at their lower ends and *which store energy during force loading of the prosthesis and return the stored energy during force unloading (e.g., controls anterior movement, and assists posterior movement) to increase the kinetic power generated for propulsive force by the prosthesis in gait* (see column 3, lines 5-14).

Regarding claim 44, the figures clearly show the resilient members of the leg portion as fastened together (directly or indirectly) at their upper and lower ends.

Regarding claim 46, see shank comprised by one spring 6/18 + portion 1. Any of springs 6/18 comprises the “spring” as claimed.

Regarding claims 47 and 48, the leg portion is attached (directly or indirectly) to the foot by way of coupling means and at least one fastener, wherein said coupling means includes a “stop” (Figure 1: 21/24/25) joining the resilient member to the prosthesis.

Regarding claim 49, the “adapter” is clearly shown in the Figures.

Regarding claim 50, it is inherent a prosthesis mimicking a natural foot, or natural foot and shank, will have a “dorsiflexion moment” that at one given moment will have a magnitude greater than a “plantarflexion moment”.

Regarding claim 51, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured **E.C. Carter** lower extremity prosthesis

to have a ratio of dorsiflexion moment to plantarflexion moment of the prosthesis on the order of 11:1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regards to statements of intended use and other functional statements (e.g., *which store; to increase; etc.*), they do not impose any structural limitations on the claims distinguishable over the device of **E.C. Carter**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

11. Claims 43-52 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **GOEMED ORTHOPAEDIE SERVICE (DE 299 20 434 U1; cited in Applicants' IDS)**.

Referring to Figure 1, GOEMED discloses a prosthetic foot comprising:

- (i)** A resilient foot (foot spring 3);

(ii) A resilient leg portion attached to the foot; wherein the resilient leg portion includes a plurality of elongated, upwardly extending resilient members (shank 11/15/16 and spring 12) which are anterior facing convexly curved (Figure 1: front surface of spiral 6, or front surface of coil 5; Figure 4: front surface of spring 40) at their lower ends and *which store energy during force loading of the prosthesis and return the stored energy during force unloading (e.g., controls anterior movement, and assists posterior movement) to increase the kinetic power generated for propulsive force by the prosthesis in gait.*

Regarding claim 44, the figures clearly show the plurality of elongated members as fastened together at their upper and lower ends.

Regarding claim 45 and claim 52, the resilient members of the leg portion are spaced apart in the sagital plane intermediate their upper and lower ends.

Regarding claim 47 and claim 48, the “coupling element” or “fastening arrangement” is 25/26/27 + 22/23/24. The “stop” is any of 22 and /or 25.

Regarding claim 49, the “adapter” is clearly shown in the Figures (e.g., adapter 15).

Regarding claim 50, it is inherent a prosthesis mimicking a natural foot, or natural foot and shank, will have a “dorsiflexion moment” that at one given moment will have a magnitude greater than a “plantarflexion moment”.

Regarding claim 51, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured **GOEMED ORTHOPAEDIE SERVICE** lower extremity prosthesis to have a ratio of dorsiflexion moment to plantarflexion moment of the prosthesis on the order of 11:1, since it has been held that where the general

conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regards to statements of intended use and other functional statements (e.g., *which store; to increase; etc.*), they do not impose any structural limitations on the claims distinguishable over the device of **GOEMED ORTHOPAEDIE SERVICE**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

12. Claims 43, 44, and 46-51 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Celebi** (US 6,402,790 B1; cited in Applicants’ IDS).

Referring to Figures 2 and 11, **Celebi** discloses a prosthetic foot comprising:

- (i) A resilient foot (40);
- (ii) A resilient leg portion attached to the foot; wherein the resilient leg portion includes a plurality of elongated, upwardly extending resilient members (shank 20 and any of springs 81) which are anterior facing convexly curved (see Figure 2 – shank 20 and springs 81 comprise a

cylindrical lower segment 24, which is anterior facing convexly curved) at their lower ends and *which store energy during force loading of the prosthesis and return the stored energy during force unloading (e.g., controls anterior movement, and assists posterior movement) to increase the kinetic power generated for propulsive force by the prosthesis in gait.*

Regarding claim 44, the figures clearly show the plurality of elongated members as fastened together at their upper and lower ends.

Regarding claim 47 and claim 48, the “coupling element” or “fastening arrangement” is 60/61. The “stop” is any of 46 and/or heads of 60.

Regarding claim 49, the “adapter” is clearly shown in the Figures (e.g., adapter at top of shank 20, which adapter is already well known in the art).

Regarding claim 50, it is inherent a prosthesis mimicking a natural foot, or natural foot and shank, will have a “dorsiflexion moment” that at one given moment will have a magnitude greater than a “plantarflexion moment”.

Regarding claim 51, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured **GOEMED ORTHOPAEDIE SERVICE** lower extremity prosthesis to have a ratio of dorsiflexion moment to plantarflexion moment of the prosthesis on the order of 11:1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regards to statements of intended use and other functional statements (e.g., *which store; to increase; etc.*), they do not impose any structural limitations on the claims distinguishable over the device of **Celebi**, which is capable of being used as claimed if one so

desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

Response to Arguments

13. Applicant's arguments with respect to newly added claim 43 have been considered but are moot in view of the new ground(s) of rejection. Regarding rejections based on **E.C. Carter** (US 2,453,969) and **GOEMED ORTHOPAEDIE SERVICE** (DE 299 20 434 U1), Applicants' argument have been adequately addressed in the rejections.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javier G. Blanco whose telephone number is 571-272-4747. The examiner can normally be reached on M-F (9:00 a.m.-7:00 p.m.), first Friday of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on **(571)272-4749**. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Javier G. Blanco/

Application/Control Number: 10/594,798

Page 12

Art Unit: 3774

Examiner, Art Unit 3774

/David H Willse/

Primary Examiner, Art Unit 3738